Lectotypifications in Atherospermataceae and Monimiaceae from Argentina

JUAN B. MARTÍNEZ-LABORDE , JUAN C. OSPINA & CHRISTIAN A. ZANOTTI

Abstract

Lectotypes for the names of one Atherospermataceae and one Monimiaceae species from Argentina are here designated.

Introduction

The family Monimiaceae Jussieu (1809: 133) is mainly distributed in tropical and subtropical areas of the Southern Hemisphere, and currently comprises 28 genera and 195–200 species of trees, shrubs or rarely lianas (Renner *et al.* 2010). Molecular research conducted by Renner (1998, 1999) confirmed that traditionally circumscribed Monimiaceae (Philipson 1993) were polyphyletic and both Siparunaceae Schodde (1970: 325) and Atherospermataceae R. Brown (1814: 553) should be considered as separate families. Morphologically, both families differ from Monimiaceae mainly in their anthers of valvar dehiscence (by slits in Monimiaceae) and their basal ovules (apical in Monimiaceae), whereas Atherospermataceae differ from Siparunaceae in the presence of two appendages at the base of each stamen, which are absent in the latter, as well as in their fruit, constituted by plumose achenes instead of drupelets (Schodde 1970, Philipson 1993, Renner 1998).

The Monimiaceae *sensu lato*—i.e., as traditionally circumscribed—from Argentina and Chile were studied by Martínez-Laborde (1983a, b). Only two species were found in Argentina, one of which (*Laureliopsis*) belongs nowadays in the Atherospermataceae. A taxonomic revision of Atherospermataceae and Monimiaceae for the *Flora Argentina* project is currently being carried out by the authors (Matínez-Laborde *et al.* unpubl.). In the framework of this revision it was noticed that the names of both species have not been lectotypified so far. To designate the corresponding lectotypes we follow the ICBN (McNeill *et al.* 2012), and suggestions published by McNeill (2014).

In the following treatment, accepted names are in boldface and synonyms are in italics. Protologues were checked in original publications. Digital images of all cited specimens in HAL, HBG, K, and P were observed at JSTOR website (http://plants.jstor.org) or at the websites of the above-mentioned herbaria; the image from SGO was provided by the curator, whereas the MA specimen was examined in person. For each taxon, details about the selected lectotype material are included, as well as remaining syntypes and the herbaria where they are deposited. Herbarium acronyms follow Thiers (2015).

Lectotypifications

Atherospermataceae R. Brown (1814: 553).

1. **Laureliopsis philippiana** (Looser) Schodde (1983: 299). *Laurelia philippiana* Looser (1934: 9). *Laurelia serrata* Philippi, *hom. illeg.* (1857: 401). **Lectotype (herein designated):—**CHILE. Valdivia. Prope Corral, 1856, *H. Krause s.n.* (SGO-049090 [SGO000002058]; remaining syntypes: Valdivia, *R. A Philippi s.n.* (HAL0110084, K000802593); *R. A. Philippi s.n.* (HBG-507573, MA 271540).

Note:—Philippi (1857: 401) published his name in a paper dealing mostly with Chilean Myrtaceae kept in the Museo Nacional de Historia Natural (SGO). In the last few paragraphs (and "since there is still room on the document") he includes the protologue of *Laurelia serrata,* which reads: "In prov. Valdivia ut videtur priore multo rarior; incolis, ni fallor, Vauvan audit". We have located five specimens bearing labels with Philippi`s handwriting. The vernacular name indication ("incolis Vauvan", "Vauvan incolarum", "Incol: Vauvan", or "Vulg: Vauvan") appears on the label of the specimens in HAL, HBG, K and MA; in two of them—those in HAL and K—it is followed by the name of the region ("Valdivia"). On the other hand, in the specimen kept in SGO the label does not mention the region, nor the vernacular name; instead, it mentions "Corral", a locality belonging to the Valdivia region, and "H. Krause", a collector who lived in Corral. Both Corral and Krause are mentioned elsewhere in Philippi's paper, in the previous part referring to Myrtaceae. Since its label differs from the protologue, in contrast to those of the HAL and K specimens, the SGO specimen should not be considered as the holotype of *Laurelia serrata.* However, taking into account that the SGO specimen is the only one bearing a year of collection (1856), which is previous to the year of publication of the name, as well as the fact that R. A. Philippi worked at that time—and for more than 40 years—at the institution where it is housed, we consider this specimen as the best candidate for lectotype designation.

Monimiaceae Jussieu (1809: 133), nom. cons.

1. **Hennecartia omphalandra** Poisson (1885: 41). **Lectotype (herein designated):**—PARAGUAY. "Forêts situées à l'est de la Cordillère de Villa Rica", September 1874, *B. Balansa 2342* (P00080325; remaining syntypes P00080323, P00080324, P01817769, K000587930, K000587931).

Note:—Poisson (1885: 42), in the protologue of *H. omphalandra,* stated the following: "Paraguay. Forêts situées à l'est de la Cordillère de Villa-Rica. Legit Balansa n° 2342". We found six specimens corresponding to Balansa´s collection number 2342, two housed in K and four deposited in P. The latter are preferable, since J. Poisson worked at P. The specimen designated here (P00080325) consists of a pistillate branch and bears an original label with the complete locality given in the protologue, as well as another label with Poisson's handwriting.

Acknowledgements

The authors are grateful to the curators of the herbaria for making the material available.

References

Brown, R. (1814) General remarks, geographical and systematical, on the botany of Terra Australis. *In*: Flinders, M. (Ed.) *A voyage to terra autralis; undertaken for the purpose of completing the discovery of that vast country, and prosecuted in the years 1801, 1802 and 1803, in His Majesty's ship the Investigator and subsequently in the armed vessel Porpoise and Cumberland Schooner.* Vol 2. G. and W. Nicol, London, pp. 533–613.
http://dx.doi.org/10.5962/bhl.title.50709

Jussieu, A.L. (1809) Mémoire sur les Monimiées, nouvel ordre de plantes. *Annales du Muséum d'Histoire Naturelle* 14: 116–135.

Looser, G. (1934) Lista de las plantas que han sido observadas en Chile en 1828 por el Dr. Carlos José Bertero. *Revista de la Asociación Chilena de Química y Farmacia* 2 (21): 9.

Martínez-Laborde, J.B. (1983a) Revisión de las Monimiaceae Austroamericanas. *Parodiana* 2 (1): 1–24.

Martínez-Laborde, J.B. (1983b) Revisión de las Monimiaceae Austroamericanas. Addenda. *Parodiana* 2 (2): 297–305.

McNeill, J., Barrie, F.R., Buck, W.R., Demoulin, V., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Marhold, K., Prado, J., Prud'homme van Reine, W.F., Smith, G.F., Wiersema, J.H. & Turland, N.J. (2012) *International Code of Nomenclature for Algae, Fungi and Plants (Melbourne Code): Adopted by the Eighteenth International Botanical Congress Melbourne, Australia, July 2011.* Koeltz Scientific Books, Königstein, 240 pp.

McNeill, J. (2014) Holotype specimens and type citations: General issues. *Taxon* 63 (5): 1112–1113.
http://dx.doi.org/10.12705/635.7

Philippi, R.A. (1857) Bemerkungen über die Chilenischen Myrtaceen. *Botanische Zeitung* 15: 393–401.

Philipson, W.R. (1993) Monimiaceae. *In*: Kubitzki, K., Rohwer, J.G. & Bittrich, V. (Eds.) *Flowering plants. Dicotyledons. Magnoliid, hamamelid and caryophyllid families*. Springer, Berlin, pp. 426–437.
http://dx.doi.org/10.1007/978-3-662-02899-5_50

Poisson, J. (1885) Sur le genre nouveau *Hennecartia* de la famille des Monimiacées. *Bulletin de la Société Botanique de France* 32: 38–42.
http://dx.doi.org/10.1080/00378941.1885.10828287

Renner, S.S. (1998) Phylogenetic affinities of Monimiaceae based on cpDNA gene and spacer sequences. *Perspectives in Plant Ecology, Evolution and Systematics* 1 (1): 61–77.
http://dx.doi.org/10.1078/1433-8319-00052

Renner, S.S. (1999) Circumscription and phylogeny of the Laurales: evidence from molecular and morphological data. *American Journal of Botany* 86 (9): 1301–1315.
http://dx.doi.org/10.2307/2656778

Renner, S.S., Strijk, J.S., Strasberg, D. & Thébaud, C. (2010) Biogeography of the Monimiaceae (Laurales): a role for East Gondwana and long-distance dispersal, but not West Gondwana. *Journal of Biogeography* 37: 1227–1238.
http://dx.doi.org/10.1111/j.1365-2699.2010.02319.x

Schodde, R. (1970) Two new suprageneric taxa in the Monimiaceae alliance (Laurales). *Taxon* 19: 324–328.
http://dx.doi.org/10.2307/1219055

Schodde, R. (1983) A new genus in the Monimiaceae alliance (Laurales). *Parodiana* 2 (2): 298–299.

Thiers, B. (2015) Index Herbariorum: a global directory of public herbaria and associated staff. New York Botanical Garden's Virtual Herbarium. Available from: http://sweetgum.nybg.org/ih